REMARKS

This communication responds to the Office Action mailed on September 22, 2005. Claims 3 and 17 are amended, no claims are canceled, and no claims are added. Claims 3 and 17 have been amended to correct a typographical error, and not for reasons related to patentability. As a result, claims 1-23 are now pending in this Application.

§102 Rejection of the Claims

Claims 1-23 were rejected under 35 USC § 102(e) as being anticipated by Bartlett et al. (U.S. 2004/0054471; hereinafter "Bartlett"). The Applicant does not admit that Bartlett is prior art and reserves the right to swear behind this reference at a later date. In addition, because the Applicant asserts that the Office has not shown that Bartlett discloses the identical invention as claimed, the Applicant traverses this rejection of the claims.

It is respectfully noted that anticipation under 35 USC § 102 requires the disclosure in a single prior art reference of each element of the claim under consideration. *See Verdegaal Bros. V. Union Oil Co. of California,* 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). It is not enough, however, that the prior art reference discloses all the claimed elements in isolation. Rather, "[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*" *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). "The *identical invention* must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP § 2131 (emphasis added).

In the Office Action, it is asserted that Bartlett discloses "selectively coupling one of the plurality of receivers to a second frequency reference to communicate with a second station" (with respect to claims 1 and 8). It is also asserted that Bartlett discloses a mechanism "wherein at least one of the plurality of receivers can be selectively coupled to the first frequency reference or to a second frequency reference to communicate with a second station" (with respect to claims

15 and 23). The Office Action alleges that these elements read on Bartlett's description of using "separate fixed tags ... to re-reference the signals received by the base stations to a common reference clock signal." Bartlett, para. [0012]. However, a careful reading of Bartlett reveals that this assertion is incorrect. Bartlett actually discloses using a single reference frequency, not multiple reference frequencies.

The assertion that Bartlett discloses "selectively coupling one of the plurality of receivers to a second frequency reference to communicate with a second station" is incorrect because the second embodiment referenced in Bartlett's paragraph [0012] makes use of the same receivers (and the same reference frequency) to effect a calibration technique that "uses signals transmitted from a fixed tag 5 ... which is constructed and operates in the same way as the mobile tag 2." Bartlett, para. [0067]. Thus, while the reference frequency remains the same, the "processing carried out by the digital signal processor 42 in each receiver 3 is different to the processing carried out in the DSP 42 used in the first embodiment." Bartlett, para. [0068].

It is respectfully noted that in "... this [second] embodiment, the receivers 3 are arranged to digitise a frequency band of 11 MHz which is centered around the 70 MHz intermediate frequency. It does this using sub-sampling techniques ...". *Id.* "When the mobile tag 2 transmits a pulse either of tone A or tone B, the output from the FFT unit 52 should include an amplitude value and a phase value for that tone. ... These amplitude and phase values will continue to be stored in the buffer 62 until the signal comparison unit 54 and the control unit 58 identify (what they think is) the end of the chirp (step S7-9) ...". Bartlett, para. [0070]. "[S]ince the clock frequencies are not synchronised in this embodiment, the phase terms for these fifteen FFT outputs will be different." Bartlett, para. [0072] "Consequently, in this embodiment, the control unit 58 determines the gradient of the best fit line 69 (using a least squares regression algorithm) and outputs this slope measurement ... together with the phase value measured from the best fit line 69 at a position corresponding to one of the fifteen FFT outputs ...". Bartlett, para. [0073]

"**In addition to receiving the chirps from the mobile tag 2, the receivers 3 also receive chirps from the fixed tag 5. The receivers process these chirps in the same way** to generate corresponding phase measurements for the signals received from the fixed tag 5. As

will be described below, the phase measurements obtained from the fixed tag 5 are used to correct for the lack of synchronisation of the receivers 3." Bartlett, para. [0074].

In fact, "... the data receiver 70 and measurement alignment unit 72 operate in the same way as described above with reference to ... the first embodiment. ... there is a constant drift in the measured phase caused by the lack of synchronisation between the mobile tag clock and the receiver clock (measured as the phase slope measurement .phi..sub.s) and as there are 15 FFT operations between the phase offset measurement ... for tone A and the phase offset measurement ... for tone B, the phase measurement determination unit 74 must add in a correction based on the phase slope measurements .phi..sub.sA and .phi..sub.sB in order to extrapolate these measurements to a common time." Bartlett, para. [0075] That is, "[t]he phase difference measurements obtained for the mobile tag 2 vary with the phase difference between the clock frequency of the tag 2 and the clock frequency of the receiver from which the measurement is derived. In this embodiment **the calibration unit 78 calculates correction values to be added to these phase difference measurements in order to effectively reference the measurements from all of the receivers 3 back to a single clock--that of the fixed tag 5, thereby removing their dependance on the different phases of the receiver clocks.**" Bartlett, para. [0078].

Thus, the receivers 3 of Bartlett do not permit "selectively coupling one of the plurality of receivers to a second frequency reference to communicate with a second station" as claimed by the Applicant in claims 1 and 8.

The assertion that Bartlett discloses a mechanism "wherein at least one of the plurality of receivers can be selectively coupled to the first frequency reference or to a second frequency reference to communicate with a second station" is incorrect for the same reason. That is, the receivers of Bartlett all operate using the same frequency reference, even during scanning operations (e.g., "... in the scan mode of operation, the receivers will scan all of the possible f_0 frequencies simultaneously"). Bartlett, para. [0173]. Thus, Bartlett does not teach a mechanism "wherein at least one of the plurality of receivers can be selectively coupled to the first frequency reference or to a second frequency reference to communicate with a second station" as claimed by the Applicant in claims 13 and 20.

Several other assertions have been made in the Office Action, attributing support to various concepts allegedly disclosed by Bartlett. However, a careful reading of each citation reveals that the discussion of the asserted elements is incorrect. These assertions have been made with respect to:

Claims 2, 3, 16, 17 – Bartlett does not disclose "determining whether a quality of service provided by a second station is greater than a quality of service provided by the first station". While Bartlett may describe situations wherein the quality of service varies, the cited reference never teaches comparing them between receivers.

Claims 4, 7– Bartlett does not disclose adjusting any frequency references; the reference for each receiver is fixed, and is the same as every other receiver. For example, the reference for Bartlett's second embodiment utilizes a 70 MHz intermediate frequency. *See* Bartlett, para. [0068].

Claims 6, 18, 19, 22 – Bartlett does not disclose "a third frequency reference" as claimed by the Applicant, since Bartlett teaches using only one frequency reference, as noted above.

Claims 9, 14, 19 – Bartlett does not disclose operations that involve "coupling the one of the plurality of receivers to operate as a receiver independent from the multiple-input, multiple-output communication system", or "wherein the plurality of signal paths comprise a portion of a multiple-input, multiple-output communication system, and wherein the signal path is a search signal path" as claimed by the Applicant. Multiple-input, multiple-output (MIMO) communication systems are not described by Bartlett, nor are search signal paths independent of MIMO system operation.

Claim 10 – Bartlett does not disclose "an arbitrary scan process" as claimed by the Applicant, since Bartlett teaches using only selected frequencies that are known to the receivers *a priori*. *See* Bartlett, para. [0099] and [0173].

Claims 12, 21 – Bartlett does not disclose "a selected one of the plurality of receivers is included in a transceiver" as claimed by the Applicant, since Bartlett teaches using a series of receivers to receive signals transmitted by the transmit-only tags 2 and 5. *See* Bartlett, para. [0011]. In the alternative, Bartlett teaches reversing the roles of transmitters and receivers. *See* Bartlett, para. [0185]. However, transceivers are not described, and the term "transceiver" was

not found by the Applicant to exist anywhere within the bounds of Bartlett. It is respectfully noted that this makes sense, as such is not needed to implement any of Bartlett's embodiments.

Claim 15 – Bartlett does not disclose a mechanism wherein "the second frequency reference comprises a second frequency synthesizer" as claimed by the Applicant, since Bartlett teaches using only one frequency reference, as noted above.

Since Bartlett does not teach the identical invention claimed, it is believed that independent claims 1, 8, 13, and 20 (as well as all claims depending from them) are in condition for allowance. Reconsideration and withdrawal of the rejection of claims 1-23 under § 102 is respectfully requested.

CONCLUSION

The Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone the Applicant's attorney Mark Muller at 210-308-5677, or the below-signed attorney (at 612-349-9592), to facilitate prosecution of this Application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,
DAVID JOHNSTON
By his Representatives,
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
Attorneys for Intel Corporation
P.O. Box 2938
Minneapolis, Minnesota 55402
(612) 349-9592

Date Nov. 22, 2005 By Ann M. McCrackin
Ann M. McCrackin
Reg. No. 42,858

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 22nd day of November 2005.

CAROLYN HULSEY
Name

Carolyn Hulsey
Signature